

REMARKS

In this paper, claims 1, 8, 9, 11, 15, 20, 24, 27, 28, 31, 35, 39 and 40 are currently amended, and claims 41 and 42 have been canceled. After the entry of the above amendments, claims 1-40 are pending.

The applicants appreciate the allowance of claims 5-7 and the indicated allowability of claims 15, 16, 20, 24, 25, 27, 28 and 31 if rewritten in independent form. Claims 15, 20, 24, 27, 28 and 31 have been rewritten in independent form, some without limitations that do not appear to be important to patentability, so it is believed that claims 15, 16, 20, 24, 25, 27, 28 and 31 now are allowable.

Claims 1-4, 8 and 36 were rejected under 35 U.S.C. §102(b) as being anticipated by Bellman, et al (US 5,382,203). This basis for rejection is respectfully traversed.

Claim 1 has been amended to clarify that the axle openings in the first and second carrier members are structured to allow relative rotation between both carrier members and the axle. Bellman, et al disclose a planet gear carrier assembly (10) comprising a hub (12), an annular face plate (14), and a plurality of planet gears (16) mounted between the hub (12) and the face plate (14). The hub (12) includes an annular disc (20) and an axially extending collar (22) integrally attached to the disc (20). The collar (22) has internal teeth (24) that fix collar (22) to a shaft (not shown) so that the collar (22) and shaft rotate as a unit. In other words, hub (12) is incapable of rotation relative to the shaft. Thus, Bellman et al neither disclose nor suggest a planet gear carrier wherein the axle openings in first and second carrier members are structured to allow relative rotation between both carrier members and the axle.

Claims 1-4, 8-14, 17-18, 23, 26, 30, 39 and 41 were rejected under 35 U.S.C. §102(b) as being anticipated by Silvestri (US 4,187,740). This basis for rejection is respectfully traversed.

Regarding claims 1-4 and 8-10, claim 1 has been amended to clarify that the first carrier member includes a first pinion pin opening at each of the plurality of first planet gear openings for mounting a first pinion pin that rotatably supports a first planet gear. It is clear from Fig. 2 of

Silvestri that the planet gear carrier (120) does not include such pinion pin openings. The only openings in the carrier member (120) are those used to screw the plate (116) onto the carrier member (120) as shown in Fig. 1. Silvestri neither discloses nor suggests the presently claimed subject matter.

Regarding claims 11-14, 17-18, 23, 26, 30 and 39 (claim 41 has been canceled), claim 11 has been amended to be in independent form and to clarify that the axle openings in the first, second and third carrier members are structured to allow relative rotation between all three carrier members and the axle, wherein all three carrier members receive the axle through their corresponding axle openings. Silvestri discloses carrier members (116), (118) and (120), wherein carrier member (118) is one-piece with a separate axle. Thus, Silvestri neither discloses nor suggests a separate third carrier member having a third carrier member axle opening for receiving the axle therethrough, wherein the third carrier member axle opening is structured to allow the third carrier member to rotate relative to the axle.

Claims 21-22 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Silvestri. This basis for rejection is respectfully traversed for the reasons noted above. Furthermore, there is no way to extend a fastener through all three of Silvestri's carrier members without striking a planet gear. The proposed modification is impossible.

Claims 19 and 35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Silvestri in view of Staheli, et al (US 2002/0187870). This basis for rejection is respectfully traversed for the reasons noted above. Furthermore, Staheli, et al discloses a planetary gear arrangement wherein a planet carrier (18) is secured to a housing (12) by shear bushings (50) and screw plugs (52). Clearly, the screw plugs (52) are not pinion pins. Thus, Staheli, et al neither discloses nor suggests the subject matter recited in claims 19 and 35.

Claims 32-24 and 36-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Silvestri in view of Bellman, et al. This basis for rejection respectfully traversed for the reasons noted above.

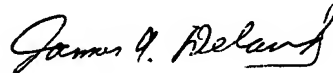
Furthermore, it is well known that planetary gear mechanisms used in high pressure air turbine gear train assemblies, such as those disclosed in Silvestri, are subjected to extreme loads and shocks. A planetary gear mechanism constructed of a light alloy most likely would be destroyed in a short time. Clearly, there is no motivation to save a few ounces of weight in a several ton military vehicle and risk destruction of the transmission under combat conditions.

Claim 40 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tabe (US 6,010,425) in view of Silvestri. This basis for rejection is respectfully traversed.

Claim 40 has been amended to clarify that the first carrier member includes a first pinion pin opening at each of the plurality of first planet gear openings for mounting a first pinion pin that rotatably supports a first planet gear. It is clear from Fig. 2 of Silvestri that the planet gear carrier (120) does not include such pinion pin openings. The only openings in the carrier member (120) are those used to screw the plate (116) onto the carrier member (120) as shown in Fig. 1. Silvestri neither discloses nor suggests the presently claimed subject matter.

Accordingly, it is believed that the rejections under 35 U.S.C. §102 and §103 have been overcome by the foregoing amendment and remarks, and it is submitted that the claims are in condition for allowance. Reconsideration of this application as amended is respectfully requested. Allowance of all claims is earnestly solicited.

Respectfully submitted,



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